

PHONE:

United States Department of Agriculture Animal and Plant Health Inspection Service Plant Protection & Quarantine 4700 River Road Riverdale, MD 20737

Permit to Move Live Plant Pests, Noxious Weeds, and Soil

Interstate Movement

Regulated by 7 CFR 330

This permit was generated electronically via the ePermits system

PERMITTEE NAME:Dr. Frisby SmithPERMIT NUMBER:P526P-18-03069ORGANIZATION:Bayer US - BiologicsAPPLICATION NUMBER:P526-190914-002

ADDRESS: 890 Embarcadero Drive FACILITY NUMBER: 3279

West Sacramento, CA 95605

MAILING ADDRESS: Bayer US - Biologics HAND CARRY: No 890 Embarcadero Drive

West Sacramento, CA 95605

DATE ISSUED: 10/16/2019 916-661-3322

EXPIRES:

FAX:

DESTINATION:Bayer US - Biologics, 890 Embarcadero Drive,

West Sacramento, CA 95605

RELEASE: Under the conditions specified, this permit authorizes the following: **Regulated Article** Life Stage(s) **Intended Use** Shipment Originally Culture **Origins** Collected **Designation** Aeromicrobium Lyophilized plant or Research -Continental Originally Collected microbes, Microbial from Within the massiliense Greenhouse (growth U.S. solutions, Petri dishes/culture chamber and lab Continental U.S. tubes, Spores included) Lyophilized plant or Research -Originally Collected Arthrobacter Continental microbes, Microbial from Within the globiformis Greenhouse (growth U.S. solutions, Petri dishes/culture chamber and lab Continental U.S. tubes, Spores included) Arthrobacter Lyophilized plant or Originally Collected Continental Research histidinolovorans microbes, Microbial Greenhouse (growth from Within the US solutions, Petri dishes/culture chamber and lab Continental U.S. tubes, Spores included) Arthrobacter Lyophilized plant or Originally Collected Research -Continental microbes, Microbial from Within the humicola Greenhouse (growth U.S. solutions, Petri dishes/culture chamber and lab Continental U.S. tubes, Spores included) Arthrobacter luteolus Lyophilized plant or Research -Continental Originally Collected microbes, Microbial Greenhouse (growth from Within the U.S. solutions, Petri dishes/culture chamber and lab Continental U.S. tubes, Spores included)

Permit Number P526P-18-03069

08/15/2021

THIS PERMIT HAS BEEN APPROVED ELECTRONICALLY BY THE FOLLOWING PPQ HEADQUARTER OFFICIAL VIA EPERMITS.	DATE
Cal P. Schotz	
Carl Schulze	10/16/2019



Arthrobacter nicotinovorans	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture		Continental U.S.	Originally Collected from Within the Continental U.S.
Arthrobacter oryzae	tubes, Spores Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	included) Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Arthrobacter oxydans		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Arthrobacter phenanthrenivorans	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Arthrobacter ramosus		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Arthrobacter sulfureu		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus acidiceler	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus aerophilus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus amyloliquefaciens	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus badius	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus bataviensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus bombysepticus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus cereus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.

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Bacillus clausii	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus drentensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus flexus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus fumarioli	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus gibsonii	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus lentus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus luciferensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus marisflavi	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus	Lyophilized plant or	Research -	Continental	Originally Collected
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Bacillus muralis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus mycoides	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus nealsonii	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Bacillus niabensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.

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Bacillus oleronius	Bacillus niacini	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
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Bacillus toyonensis Lyophilized plant or microbes, Microbial Solutions, Petri dishes/culture tubes, Spores Bacillus Weihenstephanensis Brevibacillus brevis Brevibacillus Brevibacil					
microbes, Microbial solutions, Petri dishes/culture tubes, Spores included) Bacillus Lyophilized plant or weihenstephanensis solutions, Petri dishes/culture tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial Greenhouse (growth tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial Greenhouse (growth solutions, Petri dishes/culture chamber and lab solutions, Petri dishes/culture chamber and lab Continental U.S.	Bacillus toyonensis		,	Continental	Originally Collected
solutions, Petri dishes/culture chamber and lab tubes, Spores included) Bacillus Lyophilized plant or Research - Continental U.S. from Within the solutions, Petri dishes/culture tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture chamber and lab tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial Greenhouse (growth solutions, Petri dishes/culture chamber and lab Solutions, Petri dishes/culture chamber and lab Continental U.S.			Greenhouse (growth	U.S.	
Bacillus Lyophilized plant or Research - Continental Originally Collected weihenstephanensis solutions, Petri dishes/culture tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial Solutions, Petri dishes/culture chamber and lab Continental U.S. Brevibacillus brevis Lyophilized plant or microbes, Microbial Greenhouse (growth solutions, Petri dishes/culture chamber and lab Continental U.S.					Continental U.S.
weihenstephanensis microbes, Microbial solutions, Petri dishes/culture chamber and lab tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture chamber and lab continental U.S. Brevibacillus brevis Lyophilized plant or microbes, Microbial Greenhouse (growth solutions, Petri dishes/culture chamber and lab continental U.S.		tubes, Spores	included)		
weihenstephanensis microbes, Microbial solutions, Petri dishes/culture chamber and lab tubes, Spores included) Brevibacillus brevis Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture chamber and lab continental U.S. Brevibacillus brevis Lyophilized plant or microbes, Microbial Greenhouse (growth solutions, Petri dishes/culture chamber and lab continental U.S.	Bacillus	Lyophilized plant or		Continental	Originally Collected
Brevibacillus brevis	weihenstephanensis		Greenhouse (growth	U.S.	from Within the
Brevibacillus brevis					Continental U.S.
microbes, Microbial Greenhouse (growth U.S. from Within the solutions, Petri dishes/culture chamber and lab Continental U.S.					
solutions, Petri dishes/culture chamber and lab Continental U.S.	Brevibacillus brevis				
				U.S.	
tubes, Spores included)					Continental U.S.
	1	tubes, Spores	included)		

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Brevibacillus laterosporus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Cohnella lupini	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Enterococcus faecium		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Fictibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
barbaricus	microbes, Microbial solutions, Petri dishes/culture	Greenhouse (growth	U.S.	from Within the Continental U.S.
Fontibacillus phaseoli	tubes, Spores	Research -	Continental	Originally Callasted
rontibacinus phaseon	microbes, Microbial	Greenhouse (growth	U.S.	Originally Collected from Within the
	solutions, Petri dishes/culture		0.5.	Continental U.S.
	tubes, Spores	included)		Continental O.S.
Frigoribacterium faen		Research -	Continental	Originally Collected
Trigorioacteriam raen	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture		0.5.	Continental U.S.
	tubes, Spores	included)		
Herbaspirillum	Lyophilized plant or	Research -	Continental	Originally Collected
frisingense	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture	chamber and lab		Continental U.S.
	tubes, Spores	included)		
Kocuria palustris	Lyophilized plant or	Research -	Continental	Originally Collected
	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture			Continental U.S.
	tubes, Spores	included)		
Kocuria rhizophila	Lyophilized plant or	Research -	Continental	Originally Collected
	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture			Continental U.S.
L	tubes, Spores	included)	~	
Lysinibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
boronitolerans	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture			Continental U.S.
Miorobostorium	tubes, Spores	included) Research -	Continental	Originally Callacted
Microbacterium	Lyophilized plant or microbes, Microbial		Continental U.S.	Originally Collected from Within the
aurum		Greenhouse (growth	U.S.	
	solutions, Petri dishes/culture tubes, Spores	included)		Continental U.S.
Microbacterium	Lyophilized plant or	Research -	Continental	Originally Collected
barkeri	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
ourkerr	solutions, Petri dishes/culture		0.5.	Continental U.S.
	tubes, Spores	included)		Communication C.D.
Microbacterium	Lyophilized plant or	Research -	Continental	Originally Collected
hominis	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture			Continental U.S.
	tubes, Spores	included)		
•	•	*		

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Ornithinibacillus bavariensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus agaridevorans	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus alginolyticus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus alkaliterrae	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus alvei	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus amylolyticus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus anaericanus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus assamensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus barcinonensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus barengoltzii	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus borealis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus castaneae	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus catalpae		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.

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Paenibacillus chondroitinus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus contaminans	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus durus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
graminis	microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Greenhouse (growth chamber and lab included)	U.S.	from Within the Continental U.S.
Paenibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
illinoisensis	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture tubes, Spores			Continental U.S.
Paenibacillus jamilae	Lyophilized plant or	Research -	Continental	Originally Collected
	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture	chamber and lab		Continental U.S.
	tubes, Spores	included)		
Paenibacillus lactis	Lyophilized plant or	Research -	Continental	Originally Collected
	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture	chamber and lab		Continental U.S.
	tubes, Spores	included)		
Paenibacillus lautus	Lyophilized plant or	Research -	Continental	Originally Collected
	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture			Continental U.S.
	tubes, Spores	included)		
Paenibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
lentimorbus	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture	chamber and lab		Continental U.S.
	tubes, Spores	included)		
Paenibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
massiliensis	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture			Continental U.S.
	tubes, Spores	included)		
Paenibacillus odorife		Research -	Continental	Originally Collected
	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
	solutions, Petri dishes/culture		C.B.	Continental U.S.
	tubes, Spores	included)		Continental C.S.
Paenibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
panaciterrae	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
panacitoriae	solutions, Petri dishes/culture	chamber and lab	C.B.	Continental U.S.
	tubes, Spores	included)		
Paenibacillus	Lyophilized plant or	Research -	Continental	Originally Collected
pectinilyticus	microbes, Microbial	Greenhouse (growth	U.S.	from Within the
1	solutions, Petri dishes/culture		5.5.	Continental U.S.
	tubes, Spores	included)		Continonal O.S.
I	taces, opores	moradou)		

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Paenibacillus polymyxa	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus sabinae		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus taichungensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus taiwanensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus terrigena	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus thiaminolyticus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus timonensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus typhae	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus validus		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenibacillus xylanilyticus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Paenisporosarcina indica	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Phytobacter diazotrophicus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Proteus vulgaris	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.

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Pseudacidovorax intermedius	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas chlororaphis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas fluorescens	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas graminis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas lini	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas moraviensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas putida	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Psychrobacillus insolitus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Psychrobacillus psychrodurans	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Psychrobacillus psychrotolerans	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Saccharopolyspora pogona	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Sinomonas atrocyane	aLyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Solibacillus silvestris		Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.

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Sporosarcina globispora	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Sporosarcina luteola	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Staphylococcus warneri	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Stenotrophomonas maltophilia	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth	Continental U.S.	Originally Collected from Within the Continental U.S.
Streptomyces microflavus	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Terribacillus aidingensis	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Viridibacillus arenosi	Lyophilized plant or microbes, Microbial solutions, Petri dishes/culture tubes, Spores	Research - Greenhouse (growth chamber and lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.

PERMIT GUIDANCE

- 1) This permit does not authorize movement or release into the environment of genetically engineered organisms produced with the regulated organisms described in this permit. Importation, interstate movement, and environmental release of genetically engineered plant pests require a different permit issued under regulations at 7 CFR part 340. Any unauthorized interstate movement or environmental release, including accidental release, of a regulated GE organism would be a violation of those regulations. Additional guidance and contact information for APHIS Biotechnology Regulatory Services, can be found at: https://www.aphis.usda.gov/aphis/ourfocus/biotechnology.
- 2) If an animal pathogen is identified in your shipment, to ensure appropriate safeguarding, please refer to http://www.aphis.usda.gov/import export/animals/animal import/animal imports an products.shtml
- 3) If a human pathogen is identified, please refer to the CDC Etiologic Agent Import Permit Program at http://www.cdc.gov/od/eaipp/
- 4) This permit does not fulfill the requirements of other federal or state regulatory authorities. Please contact the appropriate agencies, such as the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Food and Drug Administration, the Centers for Disease Control and Prevention, the APHIS Veterinary Services unit, the APHIS Biotechnology Regulatory Services, or your State's Department of Agriculture to ensure proper permitting.

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5) If you are considering renewal of this permit, an application should be submitted at least 90 days prior to the expiration date of this permit to ensure continued coverage. Permits requiring containment facilities may take a longer period of time to process.

PERMIT CONDITIONS

USDA-APHIS issues this permit to Frisby Smith with Bayer US - Biologics in West Sacramento, California. This permit authorizes the interstate movement of pure cultures of the listed organisms from sources in the continental United States to California for use in laboratory, growth chamber and greenhouse research in the APHIS approved facility #3279.

- 1. This permit is issued by the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). It conveys APHIS regulations and requirements for the material(s) listed on this permit. It does not reduce or eliminate your legal duty and responsibility to comply with all other applicable Federal and State regulatory requirements.
 - The permit number or a copy of the permit must accompany the shipment.
 - You must be an individual at least 18 years old, or legal entity such as partnership, corporation, association, or joint venture.
 - You are legally responsible for complying with all permit requirements and permit conditions.
 - If you violate any applicable laws associated with this permit, you may face substantial civil or criminal penalties. We may cancel all current permits and deny future permit applications.
 - Without prior notice and during reasonable hours, authorized Federal and State Regulators must be allowed to inspect the conditions associated with the regulated materials/organisms authorized under this permit.

2. The permit holder must:

- maintain a valid PPQ526 permit so long as the regulated materials/organisms are alive or viable,
- not assign or transfer this permit to other persons without APHIS PPQ authorization,
- maintain an official permanent work assignment, residence, or affiliation at the address on this permit,
- notify the Pest Permit Staff as soon as possible of any change in the permit holder's work

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assignment, residence, or affiliation,

- notify the Pest Permit Staff of the receipt of unauthorized and/or misdirected shipments of regulated materials/organisms,
- adequately mitigate environmental impacts resulting from unauthorized release of regulated materials/organisms and notify the Pest Permit staff immediately if one occurs,
- notify the Pest Permit Staff if the facility is damaged/destroyed or if you wish to decommission the facility,
- destroy all regulated materials/organisms prior to departure from the organization unless other arrangements are confirmed by the Pest Permit Staff.

Notifications to the Pest Permit Staff must be made via 866-524-5421 or pest.permits@aphis.usda.gov within one business day of the event triggering a notification.

- 3. This permit does not authorize movement or use of plant pathogens listed in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. If any organism listed as a Select Agent is identified from materials associated with this research, the permit holder is required to notify APHIS, Agriculture Select Agent Services (AgSAS) immediately by phone at 301-851-3300 option 3, and within seven (7) days submit APHIS/CDC Form 4A (Report of Identification of a Select Agent or Toxin in a Clinical or Diagnostic Laboratory) to APHIS, AgSAS; 4700 River Rd, Unit 2, Riverdale, MD 20737 (see instructions at: https://www.selectagents.gov/resources/APHIS-CDC_Form_4_Guidance_Document.pdf). Failure to comply with this requirement is a violation of the Agricultural Bioterrorism Protection Act of 2002. Plant pathogen select agents currently listed include: *Peronosclerospora philippinensis* (*Peronosclerospora sacchari*), *Conothyrium glycines* (*formerly Phoma glycinicola and Pyrenochaeta glycines*), *Ralstonia solanacearum*, *Rathayibacter toxicus*, *Sclerophthora rayssiae*, *Synchytrium endobioticum*, and *Xanthomonas oryzae*.
- 4. All persons working with the listed regulated materials/organisms must be informed of these permit conditions. Anyone working with these materials/organisms must agree to and sign/initial these conditions before beginning work. These signed conditions do not need to be submitted to USDA/APHIS but must be readily accessible and made available to Federal and State regulators upon request.

Note: these conditions may be copied and stored electronically for electronic signature and initialing provided that the permit number, authorized materials/organisms and life stages, release locations if applicable, and authorization statement all appear on the document with the permit

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- number. Signing these conditions only indicates that the person working under this permit has read them; the permit holder is the sole responsible party under this permit.
- 5. All packages for transport must minimally consist of both inner/primary and outer/secondary packages securely sealed so that both are effective barriers to escape or unauthorized dissemination of the listed materials/organisms. The inner/primary package(s) will contain all regulated materials/organisms and must be cushioned and sealed in such a way that it remains sealed during shock, impact, and pressure changes that may occur. The outer/secondary shipping container must be rigid and strong enough to withstand typical shipping conditions (dropping, stacking, impact from other freight, etc.) without opening.
- 6. Upon receipt, all packages must be opened within a Class II or III biosafety cabinet in the approved containment facility identified above to prevent the potential dissemination of the package contents. Cultures must be in a sealed container during transport to or within the permit holder's assigned research facilities.
- 7. All research activities, plant inoculations and subsequent disease development must occur within the APHIS approved Containment Facility identified above that has been inspected and found adequate for containment of the organisms received under this permit. Access to this facility must be restricted to authorized personnel.
- 8. Plant inoculations using organisms that are listed on this permit only to the genus level are restricted to the laboratory and growth chambers. Plant inoculations using organisms listed on this permit to the species level are authorized for plant inoculations in the laboratory, growth chambers, and greenhouse.
- 9. Vector transmission is not permitted under this authorization. Only mechanical inoculation of plants is permitted.
- 10. Measures to control insect vectors (e.g. black lights, yellow sticky boards, insecticides) must be in place.
- 11. Greenhouses must be screened to minimize presence of insect vectors.
- 12. Standard Operating Procedures (SOPs) must be filed with, and approved by, the APHIS PPQ Pest Permit Staff at: email: pest.permits@aphis.usda.gov; phone: 866-524-5421; fax: 301-734-8700; address: 4700 River Road, Unit 133, Riverdale, MD 20737. All contact information must be kept current and the SOPs must be dated. If requirements in the permit conditions are more restrictive than the SOPs, permit conditions take precedence. APHIS PPQ must approve any changes to the SOPs before implementation.

A list of all persons with access to the containment facility must be maintained and available upon request by Federal or State Regulatory Officials.

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- 13. Modifications to the containment facility or any changes that affect the containment of the regulated materials/organisms must be approved by APHIS prior to making changes. Please contact the Pest Permit Staff (email: pest.permits@aphis.usda.gov; phone: 866-524-5421; address: 4700 River Rd., Unit 133, Riverdale, MD 20737; Fax: 301-734-8700).
- 14. Records must be kept of all organisms maintained under this permit. Minimally the record will consist of the name of the organism identified to the lowest taxon possible, the country, or US state/territory, where each isolate was collected, and the date the isolate was received. These records must be made available to Federal and State regulators upon request.
- 15. When not working with the regulated materials/organisms, you must store and/or maintain them within the APHIS approved containment facility identified above. All stored regulated materials/organisms must be kept in a locked area with access limited to authorized personnel.
- 16. Runoff water from inoculated plants must be collected and sufficiently treated by heat (heated for 140C for three minutes) or chemical means, and be handled in such a way as to prevent movement of the live regulated organisms into adjacent agricultural or environmental areas as per the Standard Operating Procedures (SOPs) filed with, and approved by, the APHIS PPQ Pest Permit Staff.
- 17. At the conclusion of all experiments infested soil, infested growing media and infected/infested plant materials must be treated by heat (steam sterilized for 2 hours at 100C) or chemical means sufficient to kill or destroy all plant pest life stages prior to disposal as per the Standard Operating Procedures (SOPs) filed with, and approved by, the APHIS PPQ Pest Permit Staff.
- 18. DEVITALIZATION AND WASTE DISPOSAL

All regulated materials/organisms and all items coming in direct contact or exposed to the regulated materials/organisms must be sterilized/sanitized/decontaminated prior to removal from the authorized containment facility. This includes all items from shipping, culturing, care, and maintenance of these regulated materials/organisms. This requirement includes but is not necessarily limited to: packaging directly exposed to the regulated materials/organisms, substrates (culture media, soil, plant materials (food materials or host plants)), leftover/unused/unneeded live cultures, and dead specimens/cultures unless specified otherwise in the permit.

All waste materials must be treated by one of the follow methods prior to disposal:

Use any of the following, either alone or in combination: 1) autoclaved (see protocol below), 2) disposed of off-site by a facility holding a valid PPQ compliance agreement (organisms and/or contaminated waste must be stored in sealed containers prior to pick up by this company), 3) incinerated, 4) immersed in 5 percent sodium hypochlorite (household bleach from the bottle is 5 percent) for at least 20 minutes, or 5) immersed in 70 percent alcohol for at least 30 minutes. Treated waste will be double bagged prior to disposal.

Other sterilization methods are only allowed with prior written agreement from the USDA/APHIS

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WARNING: Any alteration, forgery or unauthorized use of this Federal Form is subject to civil penalties of up to \$250,000 (7 U.S.C.s 7734(b)) or punishable by a fine of not more than \$10,000, or imprisonment of not more than 5 years, or both (18 U.S.C.s 1001)



PPQ Pest Permit Staff.

Any equipment, supplies, tools, secondary shipping containers, packing materials (e.g, ice packs), etc. must be sterilized/sanitized/decontaminated prior to reuse, disposal, or removal from containment.

If using an autoclave the following protocol must be used:

- a. Waste must be autoclaved at 121 Celsius (250 Fahrenheit) for a minimum of 30 minutes at 15 psi.
- b. Autoclave tape or other indicators must be placed on each load prior to treatment. The autoclave tape or other indicator on each container must be checked to verify color change before disposal.
- c. The autoclave must be calibrated according to the manufacturer's instructions annually and a written record must be maintained.
- d. Every 3 months, you must use a commercially available biological indicator kit that uses bacterial spores of Geobacillus stearothermophilus that are rendered unviable at 121 Celsius (250 Fahrenheit). You must follow the manufacturer's instructions. If any growth is observed, you must have the autoclave serviced and retested.
- 19. Devitalization/destruction of organisms and infected material may be conducted off site by a facility holding a valid PPQ compliance agreement prior to disposal. Vendor may or may not be in the same state. All organisms, contaminants and/or packaging materials must be in sealed containers during transport to this waste management facility in order to prevent any unauthorized dissemination of the regulated articles.
- 20. There is to be no further movement or distribution of the listed regulated materials/organisms within the United States and its territories unless the recipient holds, or is named as a responsible party on a valid PPQ526 permit for receipt of such materials/organisms.

END OF PERMIT CONDITIONS

	Permit Number P526P-18-03069
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Carl Schulze	10/16/2019